

# Guidance on Sustainability Impact Assessment





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## Chapter 1

### Sustainability impact assessment: an introduction

#### The purpose of this document<sup>1</sup>

This document offers a general introduction to sustainable impact assessment (SIA). SIA is an approach for exploring the combined economic, environmental and social impacts of a range of proposed policies, programmes, strategies and action plans. Such assessments can also assist decision making and strategic planning throughout the entire policy cycle.

The document is aimed at helping policy makers to increase their understanding of the basic elements, processes and multi-dimensional nature of SIAs. It intends to increase awareness of the potential of SIA for developing more sustainable policies, strategies and action plans within OECD member countries. It is hoped that it will stimulate policy makers to implement or revisit their SIAs within their own policy and institutional context. The document gives a general outline of what an SIA is, why it is useful, its core principles and methodologies, and its main challenges. It is not exhaustive, and neither is it a technical "how to" guide for practitioners to follow when implementing an SIA. Government authorities at different levels (national, regional, local) can use this document as the basis for developing a more tailored guide for reviewing the sustainability impacts of proposed policies and action plans.

In the following chapters, we set out the steps involved in a typical SIA. These are illustrated with actual examples of methodologies used by several OECD member countries and other institutions. These examples show only some of the various possibilities and methodologies available and in use.

The examples used in this document are based on the three pillars of sustainable development: economic, environmental and social. However, visions of sustainable development are evolving, particularly when governments strive to establish sustainable development strategies and wish to fully integrate sustainability in all policy development. Some countries adopt a more integrated approach that goes beyond the idea of the three pillars and encompasses systemic and systematic sustainable development goals for policy development (in line with, for instance, Agenda 21 adopted at the 1992 United Nations Conference on Environment and Development – the Earth Summit).

#### What is an SIA?

An SIA has two main functions: (i) it is a methodological soft policy instrument for developing integrated policies which take full account of the three sustainable development dimensions and which include cross-cutting, intangible and long-term considerations; and (ii) a process for assessing the likely economic, social and environmental effects of policies, strategies, plans and programmes before they have been formulated (*ex ante*). It has some important principles:

- Sustainability in SIA means that all three sustainable development aspects are fully integrated into the assessment. This is not the case with other types of

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1. This document benefitted from voluntary contributions from Switzerland. It is partly based on presentations and discussions at the OECD Workshop on Sustainability Assessment Methodologies held in Amsterdam, the Netherlands on 14-15 January 2008 (OECD, 2008b).

impact assessments (such as regulatory impact assessments, or environmental impact assessments, see Box 1.1). Integrating sustainable development into policies means considering both short-term and long-term effects – what seems to be beneficial in the short term can be devastating in the long term. There is a risk that short-term priorities take precedence over longer-term perspectives and effects (think of health risks or depletion of ecosystems). Another element that needs to be considered is spatial impact and possible conflicts between global, regional and local objectives in policy making, both environmental and socio-economic.

- A focus beyond numbers. There is a risk that “hard” forms of analysis, such as cost-benefit analysis and monetisation, prevail over qualitative and “soft” forms of analysis and participatory approaches. This is especially problematic in relation to environmental, social and other non-market considerations. SIA uses a variety of tools and methodologies to capture the less readily monetised aspects of sustainability.
- Stakeholder involvement. Participation by stakeholders ensures input on the possible impacts (direct or indirect) and trade-offs from different perspectives and disciplines. This increases awareness of the wider implications of policies and the range of issues affected, and counterbalances the methodological limits to monetising impacts. At strategic planning levels, we usually face uncertainties in impact predictions and we touch on value questions which cannot be solved solely by expert knowledge (OECD, 2008b). Furthermore, stakeholder participation allows for greater transparency in the policy process and its underlying assumptions and considerations, and creates more sustainable and consensual policy solutions. Participation should occur throughout the SIA process. While planning stakeholder participation, it is crucial to promote a multi-disciplinary, multi-perspective and bottom-up approach. We must ask ourselves if we have a balance between gender, different generations, spatial (global, national, local) and sectoral perspectives – do we have all the necessary disciplines on board, and how can we stimulate stakeholder involvement?
- Transparency and accountability. The overall goal of an SIA is to create integrated policies which take full account of the sustainable dimensions, intangible, spatial and long-term considerations and unintended side-effects. This implies transparency and accountability at different levels, e.g. over who is involved, the procedures and methodologies used, and the reasons for the chosen mitigation options and solutions. SIAs should therefore provide all this information and stimulate reflection and learning among all those who participate.
- A match between level of detail and policy impact. The decision to undergo an SIA has to be based on the principle of “proportionate analysis”, in which the depth and scope of the impact assessment is matched to the significance, political and legal nature, and sectoral context of the policy proposal. This should not only refer to the depth and scope of the analysis of an action’s impacts, but also to the choice of which steps in the SIA process need to be emphasised, the type of impacts and mitigation options to be examined, and the provisions for monitoring and evaluation (The Evaluation Partnership, 2007).
- Clear lines of responsibility. To embed the SIA within the institutional set-up and its operations, even when using simple methods or a “quick scan” version of the SIA, clear procedures need to be established on timing, who will do what, for what purpose and with what resources. It needs to be clear who is responsible for which steps in the SIA and the decision-making process, what methods, tools and indicators will be used, which stakeholders and experts have to be involved and in what way, and how the results will be presented and to whom. Furthermore, establishing an SIA within the policy-making process may imply several adaptations to the institutional setting. For instance, new types of stakeholder networks or multi-sector advisory bodies may need to be established,

and data collection techniques and specific measurement tools may need to be developed and clearly allocated to neutral entities (e.g. research bodies, national planning bureaus, etc.). It may also require project management systems within the institutional and administrative context, involving “plan, do, check, act” cycles, including monitoring.

In carrying out an SIA, a number of questions will have to be answered in the preliminary stage in order to clearly establish the nature and goals of the initiative. For instance:

- What is the nature and scale of the issue(s), how is it evolving, and who is most affected by it?
- What are the views of the stakeholders concerned?
- What are the policy objectives and what problems need to be addressed or solved?
- What are the likely impacts (social, economic, ecological, and institutional) of the policy options?
- What are the possible unintended (secondary) side-effects?
- What changes in the target group's behaviour are desired?

#### Box 1.1. Other types of impact assessments

There are many different types of impact assessments and related assessment methodologies, i.e. social-accounting and input-output matrix, cost-benefit analysis, modelling, forecasting and back casting, including regulatory, environmental, trade, etc. These approaches evaluate a proposed policy or project by assessing its impacts on selected factors. Regulatory impact analysis (RIA), which is amongst the oldest and most common form of impact assessment used in OECD member countries, examines the costs and benefits of complying with proposed regulations (OECD, 2008a). Competition assessment reviews the effects of laws and regulations on competition in the marketplace (OECD, 2007a). Environmental impact assessments (EIA) predict the possible environmental impacts of specific projects, while strategic environmental assessments (SEA) examine those of broader policies and programmes (OECD, 2006a). Poverty impact assessments attempt to gauge the distributional impacts of development assistance programmes (OECD, 2007b). Trade impact assessments look at the economic, environmental and other effects of trade agreements and trade liberalisation (OECD, 2000). There are also integrated assessments which bring together various aspects of more sector-specific approaches (Jacob et al., 2008). For example, the European Commission's Impact Assessment system was introduced in 2003, replacing and integrating into one instrument all sectoral assessments of direct and indirect impacts of proposed measures. Revision processes have since taken place, including a public consultation in 2008. It is currently the most integrated SIA and is therefore known simply as an “impact assessment”. Some countries or regions, such as the UK or Flanders in Belgium, have integrated sustainability criteria into an existing impact assessment system, e.g. the RIA.



## SIA process and steps

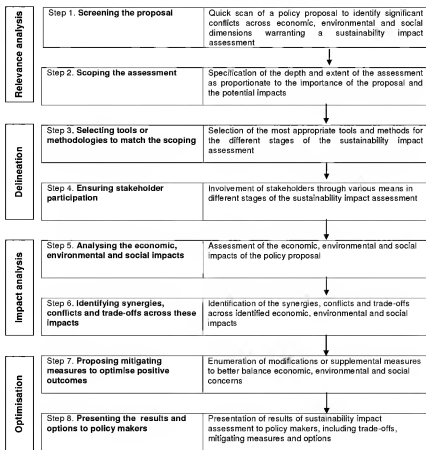
In its most mature and ambitious form, SIA consists of a closed-loop process cycle involving monitoring, adaptation and evaluation (using progress indicators). These steps indicate a logical sequence, but as an SIA is not a linear process, feedback loops will also be involved. As shown in Figure 1.1, and presented in this guidance document, SIAs should follow a sequence of steps:

1. Screening the proposal: deciding whether an SIA is needed.
2. Scoping the assessment: deciding the extent of the assessment to be conducted.
3. Selecting tools or methodologies to match the scoping.
4. Ensuring stakeholder participation: deciding on the role of stakeholders.
5. Analysing the economic, environmental and social impacts.
6. Identifying synergies, conflicts and trade-offs across these impacts.
7. Proposing mitigating measures to optimise positive outcomes.
8. Presenting the results and options to policy makers.

There is no real consensus on which approach to follow or a one-size fits-all framework for using SIAs. Ambition levels can vary considerably. A range of tools, methods, models or appraisals can be used. The level and detail of the SIA will also depend both on the availability of resources and institutional capacities, and on the choices made at political and administrative levels. SIA is more than just a technical instrument. Policy appraisals have to do with underlying governance styles and political and cultural paradigms and motives. Also planning discipline and practices may vary considerably, including the preference of certain methods and methodologies for impact assessments which have different roots (in economics or in social/cognitive sciences). For instance, quantitative methods such as cost-benefit analyses favour monetisation and modelling and tend to draw solely on expert economic knowledge and thus have clear limitations. In contrast to qualitative methods, with the underlying understanding of SIA as a cyclic process, the use of quantitative methods highlights the instrumental character of the SIA. This approach may be more appreciated in a context where hierarchy, regulatory and/or market liberalism styles prevail. Qualitative methods, such as consultation and multi-criteria analysis, however, favour non-monetary resources and draw on a diversity of stakeholder knowledge input. SIA is rather seen as a (learning) process for improvement of integrated policy decisions within a network spectrum, enabling parties and coalitions to participate in an informed debate.

The following chapters of this guide explain the relevant aspects of each of the eight steps listed above. We should reiterate that the purpose of this document is to understand the general working of the SIA process. It is not an in-depth or detailed user manual; such a manual can only be tailor-made to fit a specific political and institutional context, such as a government (national, regional) or a large institution, e.g. the OECD, European Commission, World Trade Organization, etc.

Figure 1.1. Sequence of steps in sustainability impact assessments



Source: Adapted from ARE (Swiss Federal Office for Spatial Development) (2004), *Sustainability Assessment: Conceptual Framework and Basic Methodology*, Swiss Federal Office for Spatial Development, Berne.

## Chapter 2

### Step 1. Screening the proposal

Not all proposed policies should be subjected to a sustainability impact assessment. Whether an SIA is relevant will depend on the type of initiative and its content and how far reaching are its possible impacts and consequences. In fact, there may only be a small percentage of policies and programmes which should be assessed from this perspective (Box 2.1). Many policies may have a narrow focus or a limited range of predicted impacts, warranting alternative assessment procedures. Therefore, a preliminary screening or relevance test is needed to determine which proposals should be examined further. This can be based on different rules, criteria or thresholds to decide those policy proposals which have characteristics or foreseeable impacts which are sufficient to trigger an SIA.

The entire SIA process therefore begins with a description or definition of the initiative in question. In the preliminary stage<sup>2</sup> an initial assessment of possible impacts, a "relevance analysis", is undertaken. This determines whether and to what extent an SIA is needed.

#### Box 2.1. Use of SIAs: being selective

The European Commission (EC) requests impact assessments of relevant items on the Commission's work programme, but exempts Green Papers (EC, 2005b). The Swiss approach screens Federal initiatives and programmes for conflicts between at least two sustainable development objectives (ARE, 2004). In the Federal Belgian sustainability impact assessment procedure, a "quick scan" screening phase identifies possible effects of a proposed measure on sustainable development and whether an in-depth SIA is required. Only major policy proposals for approval by the Federal Council of Ministers are screened for potentially significant economic, environmental and social impacts (Belgian Federal Administration for Sustainable Development, 2007).

Being clear about the main objectives of an initiative will also help identify the associated advantages and disadvantages. The relevance analysis should help to set the correct focus points in the study design, thereby omitting irrelevant factors at the earliest possible stage and providing greater precision in the choice of tools.

The screening process ensures the practicality and cost-effectiveness of the entire SIA process. This initial triage is essential to eliminate proposals which are only slightly relevant from a sustainability perspective and that do not warrant an assessment involving extensive staff, time and financial resources. On the other hand, overlooking proposals that imply potentially strong negative impacts for sustainable development could have undesirable consequences that could have been anticipated and avoided with a proper evaluation.

Screening proposals is not intended to be time-consuming. It should be based on readily-available information and be more qualitative than quantitative. It should involve a quick scan of the potential short-term or long-term conflicts between the sustainability dimensions, for example between economic growth and environmental protection.

2. Some methods, such as those used in Switzerland, view this preliminary work as step 0 of the process.

Generally, conflicts arise because improvements in one dimension may be linked to deterioration in another. When moderate but conflicting impacts are predicted for at least two sustainability dimensions of a policy proposal, it is a likely candidate for an SIA.

Checklists or impact matrices are the most common methods for screening proposals. Policy proposals can be broken down into their main actions or components to be assessed against economic, environmental and social criteria. For example, relevance screening in the Swiss sustainability assessment process is based on 15 pre-set economic, environmental and social criteria (Box 2.2). An attempt is made to determine causal relationships between the proposal and effects on sustainability dimensions as exemplified by these criteria with relevance rated on a scale of 0 to 3. Whether the impact is positive or negative is not addressed at this stage. A qualitative determination is then made of whether a proposal is relevant to sustainability based on a moderate causal relationship for at least two sustainability dimensions and potential significant conflicts between at least two dimensions.

### Box 2.2. Relevance screening in Swiss sustainability assessments

The relevance test in the Swiss sustainability assessment methodology is based on a criteria matrix which exposes potential impacts on the three dimensions of sustainable development – economic, environmental and social. Fifteen pre-established Federal Council sustainability criteria (Figure 2.1) are evaluated individually and assigned a score of 0 to 3 points depending on the degree of relevance: no relevance (0), low relevance (1 point), medium relevance (2 points), and high relevance (3 points). Furthermore, there are eight additional criteria that are applicable to all policy measures (Table 2.1).

Figure 2.1. 15 pre-established Swiss Federal Council sustainability criteria

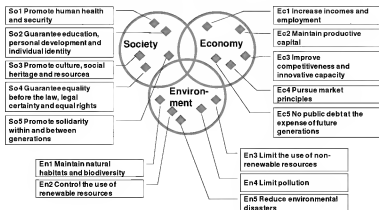


Table 2.1. Eight additional Swiss Federal Council sustainability criteria

1. Problem status	Will the initiative further exacerbate an already critical situation?
2. Trend	Will the initiative further strengthen an existing negative trend?
3. Irreversibility	Will the initiative result in negative impacts that are difficult or even impossible to reverse?
4. Burden on future generations	Will the negative impacts be felt only at a later point in time? Will this place a particularly heavy burden on future generations?
5. Risks/uncertainties	Is the initiative associated with major risks (very high potential damage/loss, even if the probability is low) and major uncertainties (insufficient knowledge of the dangers linked to impacts, or about future trends)?
6. Minimum requirements	Does the initiative result in a violation of minimum social, economic or environmental standards (e.g. thresholds or limits)?
7. Spatial impact perimeter	Will the negative impacts be felt across a wide area (spatial perimeter)?
8. Conflicts of interest	Do conflicts of interest exist between the various dimensions of sustainability, and with regard to the primary objectives of the initiative?

Source: ARE (2008), "Sustainability Assessment: Guidelines for Federal Agencies and Other Interested Parties", Swiss Federal Office for Spatial Development, Berne.

## Chapter 3

### Step 2. Scoping the assessment

Once it has been decided to conduct a sustainability impact assessment of a proposed policy, scoping is needed to determine the appropriate extent and depth of the assessment. An extensive assessment of every policy proposal would be a time-consuming and resource-intensive exercise. The depth of analysis and resources used should be proportionate to the significance of the policy, taking into account available information, time, staff and financial resources.

For example, the European Commission requests a “proportionate analysis” to match the depth and scope of the impact assessment to the significance, political and legal nature, and sectoral particularities of the policy proposal. In-depth assessments are required for new regulatory proposals in areas previously left to the Member States, while more limited analyses are needed for revisions of existing legislation (EC, 2005b).

Scoping is also used to identify the most important issues for assessment and the best ways to address them. It should set the boundaries of the impacts to be considered to ensure a focus on the most significant effects, while excluding those elements where impacts are perceived to be negligible. This can be based on the results of the screening in Step One. In addition to the content of the assessment, scoping should identify the relevant criteria and indicators for sustainability adapted to the initiative, timeframe, methods and participants (see Section 6.1). This exercise can be summarised by the following questions: “Who will do what, for what purpose, when, how and with what resources?”

Similar tools can be used for both screening and scoping (e.g. checklists, matrices, literature surveys). This reduces the time devoted to this step and helps to maintain continuity and consistency within the SIA. In the Belgian methodology, three categories of issues are addressed in the scoping process: procedural, substantive and methodological (Table 3.1).

Table 3.1. Scoping elements in Belgian SIAs

Scoping area	Examples of scoping questions
1. Procedural	Who will conduct and oversee the assessment? What financial resources are available? What human resources are available? Which decision-makers need to be engaged? Which specialists and expertise could usefully be involved? Which stakeholders should participate at what stages? What is the timing of the assessment?
2. Substantive	What is the purpose of the assessment? What are the goals and target groups of the policy? Which potential impacts should be the focus of the assessment? Which criteria will be used to assess the significance of the impacts? How extensive should the assessment be? Are there potential unintended side effects which warrant attention?
3. Methodological	What is the time horizon for the assessment? What data sources and information are available? Which methods will serve the purpose of the assessment? What set of tools should be considered? How will the assessment process be monitored and evaluated?

Source: Adapted from Bauler, T. and Wäktare, M. (2006), “Towards a Screening Mechanism for SIA: Process and Content Issues Related to the Federal Belgian Case”, ULB-IGLAT, Brussels.

## Chapter 4

### Step 3. Selecting tools or methodologies

Several methods or tools can be used in SIA depending on the stage of the assessment, the desired depth of scrutiny, and the specific impacts to be examined. The Sustainability A-Test,<sup>3</sup> a European Commission (EC) 6th Framework project involving collaboration by over 40 researchers from Europe and Canada, evaluated tools for integrated assessments of sustainable development. It has published a web book describing the various tools, instructions on their use and case studies ([www.sustainabilityA-test.net](http://www.sustainabilityA-test.net)). Each tool can be used to address different issues, including cost-benefits, short and long-term effects, global competitiveness and many key aspects of sustainable development. The tools selected for an SIA should match the resources, capacities and timeframe available for the exercise. They should be flexible and easy to adapt to a given policy or context, and should be able to be combined so that one tool can cover areas not covered by another tool.

Sustainability impact assessments balance qualitative and quantitative information in the different stages to achieve a sound and reliable assessment. The Sustainability A-Test presents and explains the basic instruments for performing particular tasks.

The different categories of tools in the Sustainability A-Test include:

1. Assessment frameworks: procedural tools describing how different types of assessments are carried out (e.g. environmental impact assessment, integrated sustainability assessment).
2. Participatory tools: tools that provide broad input by stakeholders and outside experts (e.g. Delphi surveys, focus groups).
3. Scenario tools: tools that develop alternative visions of future developments or trends (e.g. trends analysis, simulations, foresight exercises).
4. Multi-criteria analysis (MCA): tools that allow joint consideration of criteria based on different measurement units (e.g. analytic hierarchy process, preference rankings, weighted summation).
5. Cost-benefit analysis (CBA): tools that assess financial and economic parameters in comparing costs and benefits (e.g. cost-benefit analysis, cost-effectiveness analysis – CEA).
6. Accounting tools: tools that present physical as well as economic and other attributes (e.g. indicator sets, measures of well-being, ecological footprints).
7. Models: tools that simulate real-world processes (e.g. general equilibrium models, demographic models, climate models).

These tools can be used in the different steps of a sustainability impact assessment, including screening and scoping (e.g. participatory tools, scenarios), impact assessment (e.g. indicator sets, cost-benefit analysis), identifying synergies and trade-offs (e.g. multi-criteria analysis), and proposing mitigating measures (e.g. modelling) (Table 4.1). The selection of assessment tools should be based on: (i) the stage of the assessment; (ii) the depth of the assessment; (iii) the tasks to be completed; (iv) the tool group most suited to the tasks; and (v) the available resources.

3. SustainabilityA-Test, a STREP project commissioned by the European Commission under the 6th Framework research programme.

Table 4.1. The role of tools in sustainability assessment phases

	Phase I Problem analysis	Phase II Finding options	Phase III Analysis	Phase IV Follow-up
Participatory tools	Problem framing (mobilising and integrating knowledge and values)	Supporting scenario building	Providing the context for and improve robustness of MCA, CBA and CEA	Evaluating the assessment process
Scenario tools	Providing the future perspectives to problem framing	Visioning futures, finding options and setting objectives	Providing references for the application of analytical tools	–
Multi-criteria analysis tools (MCA)	–	Definition of criteria	Comparing different alternatives	–
Cost-benefit analysis (CBA)	Providing the analytical basis for problem-framing	Supporting objective setting	Full analytical characterisation of options to enable comparison	<i>Ex post</i> assessment
Cost-effectiveness analysis (CEA)				
Accounting Physical analysis Indicator sets				
Modelling				

Source: OECD (2008b), *Conducting Sustainability Assessments*, OECD, Paris.

Often combinations of tools are needed for an integrated assessment. A precondition for devising efficient tool combinations is to know the tools which exist and the analytical results they can provide.

In reality, quite often a mixture of approaches and methods is quite often used. The choice of SIA framework and methodology is usually made through political and administrative debate and a process of seeking consensus. Whatever the choice of method and methodology, an SIA is an aid to political decision-making, not a substitute for it. SIA is more an extended process than a one-off event and the choice of instruments is not the only factor in the final quality of the results of an SIA.



## Chapter 5

### Step 4. Ensuring stakeholder participation

Processes for sustainable development are characterised by openness, transparency and the participation of all stakeholders. Thus, the formulation and implementation of sustainability assessments and strategies should involve a wide range of actors (not only governments). In all cases, the assumptions and information on which the assessment process is based should be fully accessible, while decisions and outcomes should be well-founded and clearly explained. Although the tools for increasing participation in SIAs are described here as a separate step, they are relevant throughout the entire assessment process (also see Table 4.1).

Studies of the political economy of reform show that open decision-making is more effective and efficient in achieving policy results. Transparency and accessibility increase stakeholder and public confidence in the policy-making process. Checking assumptions and assessments from the different viewpoints of various interest groups leads to mutual understanding and more robust and justified conclusions. It also increases the acceptance and credibility of the results of impact assessments, which should be broadly backed by the stakeholders involved. In addition, the use of participatory and qualitative exercise logic (along with quantitative measures) involving stakeholders provides a more balanced and solid sustainability impact assessment. Often, social and environmental impacts cannot be quantified and monetised in the same way or to the same extent as economic impacts (OECD, 2008b).

The composition and representation of stakeholder groups – business, trade unions, non-governmental organisations (NGOs) and others – should be decided in advance for the overall SIA process. A minimum requirement is ensuring that economic, environmental and social interests are represented. Owing to difficulties in selecting individual participants, governments may find it easiest to work with national umbrella groups of companies, unions and NGOs. Many countries have established Sustainable Development Councils which include a wide range of civil society representatives. Their function is to advise governments on policies and they can ensure relevant and qualified participants in SIAs.

The scoping stage should determine the appropriate extent of stakeholder involvement for the specific assessment. This might include identifying the relative role of stakeholders (broad inclusion vs. depth of contributions); time and resource constraints (whether financial support should be provided to participants); degree of technical knowledge (background required); and logistical issues (documentation, timetable, number and timing of discussions, use of email and conference calls). Furthermore, gender, different age groups and regional and ethnic coverage have to be taken into account.

Sophisticated tools have been developed for incorporating the knowledge, ideas and inputs of stakeholders in SIAs (Table 5.1). These include information technology (IT) tools such as electronic focus groups and participative web tools. More conventional approaches are consensus conferences, repertory grids technique, interactive back casting, focus groups, Delphi surveys, in-depth interviews, and citizen's jury techniques. Other participative tools include deliberative polling, 21<sup>st</sup> century town meetings, and scenario building exercise (Table 5.2). The choice of participatory method will depend on the objectives, the content and complexity of the topics, and the time and resources available.

IT can either be at the core of consultations or else can support the process by informing discussions. Different methods can be used for: (i) general consultations with stakeholders; (ii) developing partnerships in co-defining and co-conducting the assessment; and (iii) joint deliberations and decision-making on final results. Various participatory tools

can also lead to different outcomes, depending on the assessment. These can include a list of options, a shared vision, new ideas and perspectives for change, recommendations for improving proposals, or the empowerment of participants by giving them the skills and confidence to take a more active role in decision-making.

Table 5.1. Tools for involving stakeholders in sustainability assessments

Method	ICT		Goal			Outcomes				
	Support	Process	Consult	Partner	Deliberate	Map of options	Shared visions	New ideas	Recommendations	Empowerment
<b>IT based</b>										
Electronic focus groups		+	+	+		+		+		
Tools to inform debates, dialogues and deliberations	+		+	+	+	+	+			+
<b>Conventional</b>										
Consensus conference			+	+	+	+	+		+	+
Repertory grid technique		+	+	+		+	+		+	
Interactive backcasting			+	+		+	+	+	+	
Focus group			+	+	+	+		+		
Delphi survey			+	+		+				
In-depth interviews			+			+				
Citizen's jury			+	+	+	+			+	+

Source: Adapted from Sustainability A-Test ([www.SustainabilityA-test.net](http://www.SustainabilityA-test.net)).

Table 5.2. Comparative chart for participatory methods

Method	Objectives	Topic				Participants	Time		EUR
		Knowledge	Maturity	Complexity	Controversial		Event	Total	
21 <sup>st</sup> century town meeting	To engage thousands of people at a time (up to 5 000 per meeting) in deliberation about complex public policy issues	+	+/-	+	+/-	Anyone	1-3 days	1 year	4
Charrette	Generate consensus among diverse groups of people and form an action plan	+/-	+/-	-	+/-	Average citizens or stakeholders Others give input	1-5 days	2-3 months	3
Citizens jury	A decision that is representative of average citizens who have been well informed on the issue. Aims for consensus	+/-	+/-	+/-	+	12-24 randomly selected citizens Experts, stakeholders and politicians give input	3 days	4-5 months	4
Consensus conference	Consensus and a decision on a controversial topic	+	+/-	+	+	10-30 randomly selected citizens Others give input	3 week-ends	7-12 months	4
Deliberative polling	To get both a representative and an informed (deliberative) view of what the public thinks and feels about an important public issue	-	+/-	-	+/-	A random and representative sample of the population	1 day	8 months	4
Delphi	Expose all opinions and options regarding a complex issue	-	-	+	+/-	Experts	Variable	Variable	1-3
Expert panel	Synthesise a variety of inputs on a specialised topic and produce recommendations	-	-	+	+/-	Experts	Variable	Variable	2
Focus group	Expose different groups' opinions on an issue and why these are held (reasoning)	+/-	-	m	+/-	Stakeholders and/or citizens	2 hours – 1 day	1 month	1
PAME	Evaluating and learning	+/-	+/-	+/-	+/-	All stakeholders	Variable	Variable	Var
Planning Cells	Citizens learn about and choose between multiple options regarding an urgent and important issue. Develop action plan	+/-	-	m	-	25 average citizens Experts and stakeholders present positions	5 days	5 months	4
Scenario-building exercises	Planning and preparedness for uncertain future. Vision-building	-	-	+	+/-	Anyone	2-5 days	6 months	1-3
Technology festival	Provide a means for public debates about societal issues of science and technology	-	-	+/-	+/-	Anyone	1-2 days	6-12 months	4
The World Café	Generating and sharing ideas	+/-	-	-	+/-	Anyone	4 hours – 1 day	1 month	1

**Legend**

Topic	+	m = medium	-
Knowledge	A lot of common knowledge exists		There is little general knowledge
Maturity	Most people have already formed opinions on the subject		The subject is new, people are still forming their opinions
Complexity	Highly complex or technical		Not very complex or technical
Controversial	Highly controversial		Not very controversial

+/- means that the method can address subjects with either + or -.

EUR: 1 = inexpensive, 2 = moderate, 3 = expensive, 4 = very expensive

Source: King Baudouin Foundation and the Flemish Institute for Science and Technological Assessment (2005), *Participatory Methods Toolkit, A Practitioner's Manual*, King Baudouin Foundation and the Flemish Institute for Science and Technological Assessment, Brussels.

## Chapter 6

### Step 5. Analysing the economic, environmental and social impacts

From Step Five onwards, the process enters a more technical stage. Steps Five, Six and Seven form the “backbone” of the SIA process. Although presented in a sequence, the steps are not linear, but often feedback loops are needed to connect together elements of these steps for the best possible outcome. The core of an SIA is the analysis of the short, long-term and cross-cutting economic, environmental and social effects of the proposed policy. The aim is to identify the intensity and direction of the potential impacts in the different domains. Baseline data should reflect the assessment objectives and criteria identified in the screening and scoping. The types of checklist questions used during the screening and scoping steps can also be used for identifying the most significant impacts. However, the analysis will need to be more detailed, and the questions will often be specific to the sector or domain.

As we have outlined in the previous chapter, several tools can be used for impact analysis. It is not appropriate to use a single evaluation method or tool, since part of the SIA process involves searching for the best possible relationship between the object of the evaluation and the method and process to be used. SIAs can build on domain-specific assessment processes (e.g. EIAs, RIAs, see Box 1.1), whose results can be incorporated into the given impact area. The separate partial assessments of the different domains can then be integrated into a comprehensive qualitative assessment.

#### The differences between criteria and indicators

Specific sets of criteria and indicators are used for assessing sustainability impacts. The use of the words criteria and indicators, however, is not always consistent. Whilst explaining the methodological differences between criteria and indicators is beyond the scope of this document, it is important to be clear about their broad differences:

- Criteria are more generic and mostly used in the ex ante assessment process. Criteria are often formulated as questions, e.g. “Does the option affect prices consumers pay?”
- Indicators are more specific and mostly used for ex post assessments and evaluations of policies and strategies, e.g. “The net price difference for consumers of product type A.”

A wide variety of sustainable criteria has been developed by different governments and institutions. These criteria range from the generic to the very detailed. Moreover, additional sets of criteria for specific policy areas have been developed, such as for transport or trade.

Indicators are crucial to measure the outcomes and results of formulated sustainable development policy targets or goals, e.g. a country aims to reduce its CO<sub>2</sub> emissions by 20% by the year 2015. In the process of developing a policy, strategy or action plan, the initial SIA criteria can evolve into concrete indicators. To monitor the EU Sustainable Development Strategy, the European Commission has developed a set of indicators containing three levels within each of the three sustainable dimensions (EC, 2005a). Another example is the Austrian Government, which uses as the starting point for its indicator set the “2-sphere model”: the man/society sphere and the environment sphere. This allows for a more systematic and integrated view of the socioeconomic system, as the man/society sphere covers all the central theme areas or values that are required for successful human life in the context of a liberal, democratic constitutional state (Austrian Federal Ministry of

Agriculture, Forestry, Environment and Water Management, 2006). These different approaches are examples of the evolutions in sustainable development thinking that we touched on in Chapter 1.

The main purposes of the development and use of sustainability criteria in an SIA are to support effective policy choices, improve the quality of proposals, and reduce as much as possible uncertainties around often complex societal issues and impacts. The composition of assessment criteria can vary according to needs and consensus on purpose, scope, time investment, the existence of national sustainable development strategies (NSDS), etc.<sup>4</sup> Such choices include, among other aspects, deciding whether or not a full SIA is needed, whether an impact is significant, whether one mitigating option is better than another, etc. The Swiss example (Box 2.2) uses criteria based on the three pillars, expanded with cross-cutting sustainable aspects. On the other hand, the Belgian Federal Government conducts an SIA quick scan, which includes criteria for the three pillars plus some effects on government (Belgium Federal Administration for Sustainable Development, 2007). The European Commission uses a more elaborate set of criteria around key sustainable impact topics, subdivided by a set of key questions, also based on the three pillars. It also incorporates elements from the RIA. The EC's approach is generally considered to be the most integrated form of SIA currently existing (Table 6.1).

### The capital approach

The development of criteria and indicators can also be based on the capital approach. In this approach, total national wealth is broadly defined to include: (i) financial capital such as stocks, bonds and currency deposits; (ii) produced capital such as machinery, buildings, telecommunications and other types of infrastructure; (iii) natural capital in the form of natural resources, land and ecosystems; (iv) human capital in the form of an educated and healthy workforce; and (v) social capital such as functioning social networks and institutions. The indicators or criteria are either linked to foundational well-being, which is essential to society, or to economic well-being, which is derived from market activity.

Impact analysis using this type of indicator set could assess whether a proposed policy would contribute to the increase or decrease over time (in terms of stocks and flows) of financial, natural and social capital. Trade-offs can also be identified, e.g. increases in use of energy resources vs. declines in human capital stock. This indicator framework also underlines the need to maintain certain critical forms of capital (foundational) and the limited substitutability among different forms of capital (economic vs. foundational).

Using this approach, each criterion or indicator can be given a quantitative and/or qualitative rating or score. The complexity of the analysis will largely depend on the type of tools selected. In the case of quantitative data a weighing process (calculation models) will be applied. The purpose of this analysis is to gain insight into the possible impacts in all the sustainable dimensions. This helps to develop more specific and operational objectives in the policy or programme and forms a basis for Step Six (identifying synergies, conflicts and trade-offs).

4. "Governments first agreed to prepare national sustainable development strategies as part of Agenda 21 [...]. The purpose of these strategies was to translate the Summit's ideas and commitments into concrete policies and actions. Governments agreed to 'adopt national strategies for sustainable development [which should] build upon and harmonise the various sectoral, economic, social and environmental policies and plans that are operating in the country. Its goals should be to ensure socially responsible economic development for the benefit of future generations'." (OECD, 2006b)

Table 6.1. A summary of the criteria and questions for main impact topics used in the European Commission's Impact Assessment

Economic impacts	Social impacts	Environmental impacts
<p>Functioning of the internal market and competition</p> <p><i>Example: What impact (positive or negative) does the option have on the free movement of goods, services, capital and workers?</i></p>	<p>Employment and labour markets</p> <p><i>Example: Does it lead directly or indirectly to a loss of jobs?</i></p>	<p>The climate</p> <p><i>Example: Does the option affect the emission of greenhouse gases (e.g. carbon dioxide, methane etc) into the atmosphere?</i></p>
<p>Competitiveness, trade, and investment flows</p> <p><i>Example: What impact does the option have on trade barriers?</i></p>	<p>Standards and rights related to job quality</p> <p><i>Example: Does the option affect the access of workers or job-seekers to vocational or continuous training?</i></p>	<p>Transport and the use of energy</p> <p><i>Example: Does the option affect the energy intensity of the economy?</i></p>
<p>Operating costs and conduct of business /small and medium-sized enterprises</p> <p><i>Example: Will the option impose additional adjustment, compliance or transaction costs on businesses?</i></p>	<p>Social inclusion and protection of particular groups</p> <p><i>Example: Does it lead directly or indirectly to greater equality or inequality?</i></p>	<p>Air quality</p> <p><i>Example: Does it have an effect on emissions of acidifying, eutrophying, photochemical or harmful air pollutants that might affect human health, damage crops or buildings or lead to deterioration in the environment (soil or rivers etc)?</i></p>
<p>Administrative burdens on business</p> <p><i>Example: What is the impact of these burdens on SMEs in particular?</i></p>	<p>Gender equality, equality treatment and opportunities, non-discrimination</p> <p><i>Example: Does the option have a different impact on women and men?</i></p>	<p>Biodiversity, flora, fauna and landscapes</p> <p><i>Example: Does it affect protected or endangered species or their habitats or ecologically sensitive areas?</i></p>
<p>Public authorities</p> <p><i>Example: Does the option require the creation of new, or the restructuring of existing, public authorities?</i></p>	<p>Individuals, private and family life, personal data</p> <p><i>Example: Does it affect the right to liberty of individuals?</i></p>	<p>Water quality and resources</p> <p><i>Example: Does the option decrease or increase the quality or quantity of freshwater and groundwater?</i></p>
<p>Property rights</p> <p><i>Example: Are property rights affected (land, movable property, tangible/intangible assets)? Is acquisition, sale or use of property rights limited?</i></p>	<p>Governance, participation, good administration, access to justice, media and ethics</p> <p><i>Example: Does it affect the individual's access to justice?</i></p>	<p>Soil quality or resources</p> <p><i>Example: Does the option affect the acidification, contamination or salinity of soil, and soil erosion rates?</i></p>
<p>Innovation and research</p> <p><i>Example: Does it facilitate the introduction and dissemination of new production methods, technologies and products?</i></p>	<p>Public health and safety</p> <p><i>Example: Will it affect health due to changes in energy use and/or waste disposal?</i></p>	<p>Land use</p> <p><i>Example: Does it affect land designated as sensitive for ecological reasons? Does it lead to a change in land use (for example, the divide between rural and urban, or change in type of agriculture)?</i></p>

Table 6.1. A summary of the criteria and questions for main impact topics used in the European Commission's Impact Assessment (*continued*)

Economic impacts	Social impacts	Environmental impacts
Consumers and households	Crime, terrorism and security	Renewable or non-renewable resources
<i>Example: Does the option affect the prices consumers pay?</i>	<i>Example: Does the option improve or hinder security, crime or terrorism?</i>	<i>Example: Does it reduce or increase use of non-renewable resources (groundwater, minerals etc)?</i>
Specific regions or sectors	Access to and effects on social protection, health and educational systems	The environmental consequences of firms and consumers
<i>Example: Will it have a specific impact on certain regions, for instance in terms of jobs created or lost?</i>	<i>Example: Does the option affect the financing / organisation / access to social, health and care services?</i>	<i>Example: Does the option lead to more sustainable production and consumption?</i>
Third countries and international relations	Culture	Waste production / generation / recycling
<i>Example: Does the option affect developing countries at different stages of development (least developed and other low-income and middle income countries) in a different manner?</i>	<i>Example: Does the proposal have an impact on cultural diversity?</i>	<i>Example: Does the option affect waste production (solid, urban, agricultural, industrial, mining, radioactive or toxic waste) or how waste is treated, disposed of or recycled?</i>
Macroeconomic environment	Social impacts in third countries	The likelihood or scale of environmental risks
<i>Example: Does the option have overall consequences for economic growth and employment?</i>	<i>Does it increase poverty in developing countries or have an impact on the income of the poorest populations?</i>	<i>Example: Does the option affect the likelihood or prevention of fire, explosions, breakdowns, accidents and accidental emissions?</i>
		Animal welfare
		<i>Example: Does the option have an impact on the health of animals?</i>
		International environmental impacts
		<i>Example: Does the option have an impact on the environment in third countries that would be relevant for overarching EU policies, such as development policy?</i>

Source: Adapted from EC (2009), *Impact Assessment Guidelines*, European Commission, Brussels, available at [http://ec.europa.eu/governance/impact/commission\\_guidelines/docs/iag\\_2009\\_en.pdf](http://ec.europa.eu/governance/impact/commission_guidelines/docs/iag_2009_en.pdf).



## Chapter 7

### Step 6. Identifying synergies, conflicts and trade-offs

Once the potential impacts of a proposed policy have been enumerated, the next step is to identify the major synergies, conflicts or trade-offs across the economic, environmental and social domains. The aim is to compare the positive and negative impacts in the different domains and to tease out potential conflicts. For example, regulations to control polluting emissions will have positive environmental effects, but possibly also negative impacts on economic competitiveness. Similarly, reforms to eliminate environmentally-harmful subsidies can have positive ecological and economic outcomes, but also negative social impacts by endangering the welfare of certain labour groups and communities.

This step, which in practice is also closely linked to Step Seven (mitigating measures), is the most contentious. Unlike economic impacts, it is often difficult to assign monetary values to environmental and social impacts. Because qualitative (social) aspects are not so easily quantifiable, some argue that economic factors will be given more weight in assessments and overshadow the potential ecological and social concerns, even though these impacts may be equally or more severe than the economic impacts.

However, there are a number of approaches for comparing economic, environmental and social impacts on more or less equal terms. For example, a large number of methods for multi-criteria analysis exist to rank and compare sustainability impacts in the different pillars (Table 7.1). These methods differ in terms of the decision rule used on compensation and the type of data they handle. Compensation or compensability refer to the possibility of trading-off negative impacts (e.g. high pollution levels) against the positive effects of another criterion (e.g. income growth). There are basically three ways to compensate for trade-offs:

1. A fully compensatory method allows the weak performance of one criterion to be totally compensated for by the good outcomes of another.
2. A partial compensatory method sets limits to the ability to compensate.
3. A non-compensatory method allows no trade-offs. In other words, “weak sustainability” allows natural or environmental capital to be traded off against produced or manufactured capital, while “strong sustainability” does not allow for such substitutions.

SIAs can also incorporate various kinds of information expressed in different units: quantitative figures such as monetary values; physical quantities such as pollutant emissions; and more qualitative measures of human capital and social values. The measures of different types of impacts can be standardised and ranked or rated according to their perceived degree of importance.

Whatever the choice of methods, it is important to leave the final assessment of the impacts to a combination of multi-criteria analysis and democratic deliberation.

Table 7.1. Selection criteria for multi-criteria analysis methods

Method	Compensatory	Partial-compensatory	Non-compensatory	Quantitative data	Qualitative data	Mixed data
Multi-attribute value theory	+					+
Weighted summation	+			+		
Analytic hierarchy process	+					+
Preference ranking organisation method for enrichment evaluations		+				+
Novel approach to imprecise assessment and decision Environments		+				+
REGIME		+			+	+
Dominance method			+		+	

Source: Adapted from Sustainability A-Test ([www.SustainabilityA-test.net](http://www.SustainabilityA-test.net)).

## Chapter 8

### Step 7. Proposing mitigating measures

After the main conflicts or necessary trade-offs across the sustainability impacts in the economic, environmental and social domains have been identified, the next step is to consider mitigating measures. In other words, what are the possible alternatives and solutions? This step, which builds on and is closely related to Step Six, develops measures or frameworks for minimising the potential negative effects and strengthening the positive sustainable aspects of the policy proposal. The intent is to avoid or reduce undesired impacts, while nurturing the desired impacts as much as possible.

Areas already displaying a continuous downward trend and which would be further negatively affected by the proposed policy should receive special attention. Relevant questions include whether there is a downward trend in individual criteria; whether the negative impacts are irreversible; whether there are minimum sustainable development requirements which are not being met; whether there is scope to improve the proposal for these individual criteria; and whether there are opportunities to lessen negative impacts through ancillary measures.

Scenarios and modelling can be used to show how mitigating measures will affect outcomes in the three dimensions. The scenarios should identify the central driving and inhibiting factors of future developments by varying the assumptions about the directions these factors might take. These scenarios can incorporate modifications and supplementary measures to enable the three sustainable development dimensions to be better balanced.

For negative effects identified in any of the domains, the following mitigation hierarchy should be followed: first avoid, second reduce, and third offset. Some basic rules should be respected in the appraisal process (Hugé, 2008):

- ensure a full justification for a partially non-sustainable option by the party proposing this option;
- avoid significant negative effects;
- ensure the future is protected (no transfer of negative effects to next generations); and
- ensure explicit, open and sound arguments for the choices proposed (transparency).

Preference should be given to those scenarios in which none of the three sustainability dimensions is too strongly impaired. The proposed options should all meet the following minimum requirements: (i) environmental standards established to protect human and environmental health; and (ii) living standards in keeping with social well-being or to safeguard human rights. The aim is to develop “win-win” situations where mutually-reinforcing gains can strengthen the economic base, ensure equitable living conditions, and protect and enhance the environment. Where this is impossible, the trade-offs should be clearly indicated to guide decision-makers.

In the case of the environment, for example, proposed policy reforms in different sectors can have both positive and negative impacts and necessitate appropriate mitigating measures. In many cases, different types of policy instruments – regulations, taxes, legal frameworks – can be combined to produce more optimal outcomes. For example, agricultural land reforms may require equity considerations and skills training to prevent damaging ecological side effects. Fiscal reforms should ensure that new tax levies or relief

also help internalise environmental costs. Trade liberalisation may need to be accompanied by stronger environmental regulation and enforcement to stem the offshore movement of polluting sectors.

The importance of formulating alternatives is to move from a problem description towards concrete solutions. The advantage of this approach is that innovation and prevention are stimulated and several risks are reduced. It also has a positive effect on public participation, as different perspectives and options have been included. The possible impact on administrative burdens should be taken into account when proposing alternatives.

## Chapter 9

### Step 8. Presenting the results and options to policy makers

The results of SIAs – and alternative policy options as mitigating measures – must be presented to policy makers in a transparent and understandable way. Decision makers can then examine the trade-offs among the impacts across the three dimensions and decide how to improve proposals to maximise opportunities for a win-win outcome.

Assessment presentations should provide both an overall view and an illustration of the major individual effects in the economic, environmental and social domains. They should clarify indirect impacts, present important conflicts, highlight areas where mitigating measures are needed, indicate alternative approaches to mitigate the undesirable impacts, and present optimisation opportunities. When presenting different policy options, the presentation can compare and contrast their: (i) effectiveness – the extent to which the option can achieve the objectives of the proposal; (ii) efficiency – the extent to which the objectives can be achieved with a given level of resources; and (iii) consistency – the extent to which the option limits trade-offs across economic, environmental and social domains.

Assessment presentations should include an appropriate mixture of qualitative information and text along with graphics and tables. Figures can communicate a picture to decision-makers and other end-users quickly and effectively. They can clearly signal problematic impacts that require intervention. Assessment findings can be illustrated through approaches ranging from simple tables to more complicated multi-dimensional graphics and interactive software.

For example, the key impacts of a proposed policy can be presented according to a traffic light system, where negative effects are indicated in red, neutral effects in yellow and positive effects in green. Figure 9.1 provides an example of an assessment of a Swiss project to link two major ski areas, which highlights negative effects for the environment, positive effects for the economy, and mixed social impacts. The overall evaluation is slightly negative, placed at -0.08 on a qualitative scale of -2 (extreme negative impact on sustainable development) to +2 (extreme positive impact on sustainable development).

Spider diagrams are another tool for presenting the economic, environmental and social impacts of policy proposals and variants including mitigating measures (Figure 9.2). They visually illustrate the extent of impacts on numerous sub-criteria in the three domains.

Internal procedures should be developed to make clear who has access to specific data, how the results will be presented (report) and to whom. In terms of good governance, transparency and accountability of the governmental institutions and the policy-making processes, it is relevant to establish rules for availability of information and public access to the results.

Figure 9.1. Traffic light presentation of sustainability impact assessment

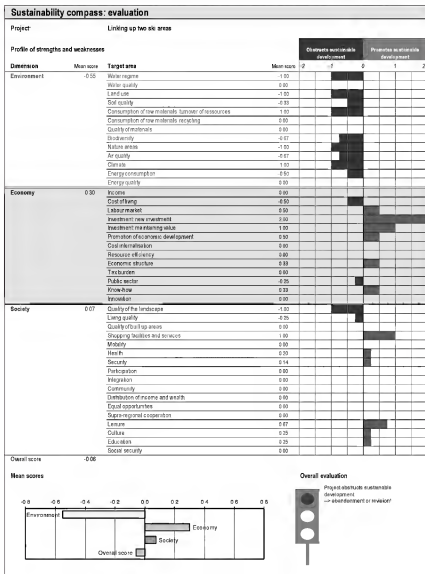
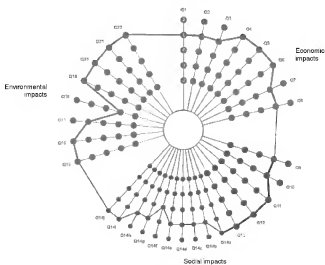

Source: Canton of Berne (2008), *Sustainability Compass Guide*, Canton of Berne, Berne.

Figure 9.2. Spider diagram of sustainability impact assessment



Source: Adapted from DEFRA (Department for Environment, Food and Rural Affairs) (2007), "Stretching the Web", DEFRA, United Kingdom, [www.defra.gov.uk/sustainable/think/stretch/demo.htm](http://www.defra.gov.uk/sustainable/think/stretch/demo.htm).

## Chapter 10

### Implementing sustainable impact assessments

Having outlined all the steps involved in conducting an SIA, in this final chapter we summarise some of the practical points to bear in mind when implementing them.

#### When can SIAs be used?

It is vital that an SIA is executed right at the beginning of the policy development process. An SIA allows for better-informed decision making throughout the policy process and raises awareness of a wide range of policy challenges related to sustainable development. Furthermore, it helps to reinforce existing debates and the quality and coherence of policy proposals; to set the agenda for sustainable development; to identify critical issues, such as future challenges and impacts; to show key trends and set priorities; to deliver results on the ground; to raise the level of dialogue and participation; and to increase transparency of the policy decision-making process at large. It can be applied to different targets, including policies, projects and regulations, and at different levels, including local, regional, national, and international, although this guidance document has mainly looked at national policies.

An SIA can support both the further integration of sustainable development principles into sectoral policies and programmes and the development of national sustainable development strategies (NSDS). In fact, SIAs should be an integrated element of NSDS as well as sustainability strategies at sectoral, regional and other levels. As identified in *Good Practices in the National Sustainable Development Strategies of OECD Countries*, "[s]ound analysis is important in helping to identify the underlying trade-offs between economic, environmental and social objectives in priority-setting and policy making for sustainable development. Such assessments seek to develop information on changing economic, environmental and social conditions, pressures and responses, and their correlations with strategy objectives and indicators" (OECD, 2006b). SIAs should build on the NSDS institutional framework to ensure high-level political support for the assessment process, the full participation of relevant agencies, and transparency and public participation. As a key decision-making tool, SIAs help to frame problems, identify policy impacts on all dimensions and scope solutions. In this, sustainability impact assessments can contribute to the co-ordination and integration of policies and better governance for sustainable development.

#### Practical considerations for effective implementation

In order to assure an effective implementation of the SIA, the following practical aspects need special attention (for more information see EEAC, 2006):

- Symmetries and balance. SIA demands an integrated approach. This implies that social, ecological and economic impacts of policies are typically subject to more detailed scrutiny than solely the one dimensional effects (e.g. ecological) of sectoral policies. Furthermore, a balanced input (formal or informal) by NGOs and experts from various sectors as well as business partners should be guaranteed.
- Enlarged framing. The scoping and framing of assessments is a particularly crucial phase in the process. There is a risk that the leading department can



sometimes neglect the concerns of other departments or sectors and as a consequence can overlook alternative, innovative and integrated policy options.

- **Adequate quality assurance.** When installing the SIA process and procedures, sufficient “separation of powers” needs to be safe-guarded. This applies to the assessment unit and the decision-making entity, and to proper arrangements for independent review. A conflict of interest can occur if the same people are responsible for deciding on the scope of the SIA, conducting the actual screening and then implementing the policy or plan. Lack of time and resources or the complexity (variety of knowledge required) of the policy may push those involved to choose a more superficial SIA. It is impossible to ensure a fair and comprehensive SIA if the balancing of interests is conducted by an individual person without any input from others in the form of conflicting opinions. Shortcomings in quality assurance are exacerbated by a lack of transparency in the assessment process.
- **Sufficient capacity.** Sound and high quality assessment, especially of complex and far-reaching proposals, is demanding of time, resources and skills. These are not always adequate. Additional training and capacity building for executing SIAs and cross-sector working may be needed to assure quality and improve staff skills and capacities.
- **Opportunities for learning.** There is considerable potential for deliberation, social learning and innovation from a more open and pluralistic assessment process. This leads to better practice and more sound integrated policies, thereby enhancing sustainable development. Unfortunately, SIA is still too often used for the ex post legitimization of policies and decisions. An ex post evaluation implies that the policy has already been decided upon or executed and possible impacts or trade-offs cannot be prevented and are more difficult to repair. Therefore, an ex post evaluation is less desirable from a sustainable development point of view (and bearing in mind the precautionary principle).

For further information, following are some helpful reference points for SIAs (also referenced in the previous chapters):

- European Commission’s Impact Assessment website: [http://ec.europa.eu/governance/impact/index\\_en.htm](http://ec.europa.eu/governance/impact/index_en.htm);
- OECD (2008b), *Conducting Sustainability Assessments*, OECD, Paris; and
- Sustainability A-Test Webbook: [www.SustainabilityA-Test.net](http://www.SustainabilityA-Test.net).

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